



## Material Safety Data Sheet

Sodium Persulfate, 25% w/v solution

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### 1. Product Identification

<b>Synonyms:</b>	CA-6 Analyzer Nickel Reagent #1
<b>CAS No.:</b>	Not applicable to mixtures.
<b>Molecular Weight:</b>	Not applicable to mixtures.
<b>Chemical Formula:</b>	Not applicable to mixtures.
<b>Product Codes:</b>	ECD P/N 2010492-1
<b>Manufacture By:</b>	Electro-Chemical Devices, Inc.  1681 Kettering  Irvine, CA 92614  Phone: (800) 729-1333

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### 2. Hazards Identification

#### Emergency Overview

<b>GHS Classification:</b>	Skin irritation (Category 2), H315  Eye irritation (Category 2A), H319  Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
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**Caution!** Irritant Oxidizer Avoid contact with skin, eyes, or clothing

**Contains:** Sodium persulfate, Water



**Hazard pictograms**

**Signal word:** Warning

**Hazard statements** H315 Causes skin irritation.



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## Precautionary statements

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant



## HMIS RATING

## POTENTIAL HEALTH EFFECTS

### Target Organs:

Eyes, skin, and respiratory system.

### Eye Contact:

May cause irritation, redness, pain, and tearing.

### Inhalation:

Respiratory tract irritant may cause burns on acute contact.

### Skin Contact:

May cause irritation, redness, and pain.



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**Ingestion:** May cause burns of the mouth, throat and stomach. Symptoms may include abdominal pain, nausea and vomiting, general gastrointestinal upset.

**Chronic Effects/Carcinogenicity:** None

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## 3. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
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Ammonium Citrate Tribasic	3458-72-8	50% w/v	No
Water	7775-27-1	Balance	No

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## 4. First Aid Measures

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to the doctor in attendance.  
Move out of dangerous area.

**ORAL EXPOSURE:** If swallowed, wash out mouth with water provided person is conscious.  
Never give anything by mouth to an unconscious person.  
Consult a physician immediately.

**INHALATION EXPOSURE:** If inhaled, remove to fresh air.  
If breathing is difficult, GIVE OXYGEN.  
Consult a physician.

**DERMAL EXPOSURE:** In case of skin contact, flush with copious amounts of soap and water for at least 15 minutes.  
Take off contaminated clothing and shoes immediately.  
Consult a physician.

**EYE EXPOSURE:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.  
Assure adequate flushing by separating the eyelids with fingers.  
Consult a physician.



## 5. Fire Fighting Measures

Flammability of the Product:	Non-flammable
Auto-ignition Temperature:	Not applicable
Flash Points:	Not applicable
Flammable Limits:	Not applicable
Products of Combustion:	Not applicable
Fire Hazards:	Not combustible, may react with reducing agents and combustibles and cause ignition.
Explosion Hazards:	Static Discharge: None
Mechanical Impact:	None
Fire Fighting Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective Clothing:	Use protective clothing and breathing equipment appropriate for the surrounding fire.
Special Remarks:	None

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## 6. Accidental Release Measures

### PROCEDURE(S) OF PERSONAL PRECAUTIONS

- Exercise appropriate precautions to minimize direct contact with skin or eyes.

### ENVIRONMENTAL PRECAUTIONS

- Do not let product enter drains.

### METHODS FOR CLEANING UP

- Absorb on sand or vermiculite and place in closed containers for disposal.

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## 7. Handling and Storage

### HANDLING

- User Exposure- Avoid contact with eyes, skin, and clothing. Avoid formation of dust and aerosols.

Wash thoroughly after handling.



## STORAGE

- Suitable: Keep container tightly closed in a dry and well-ventilated place.

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## 8. Exposure Controls/Personal Protection

### ENGINEERING CONTROLS

- Safety shower and eye bath. Contains no substances with occupational exposure limit values.

### PERSONAL PROTECTIVE EQUIPMENT

- Respiratory: Respiratory protection is not required.
- Hand: Protective gloves. Neoprene gloves
- Eye: Chemical safety glasses with side-shields conforming to EN166.

### GENERAL HYGIENE MEASURES

- Handle in accordance with good industrial hygiene and safety practice.
- Wash thoroughly after handling.

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## 9. Physical and Chemical Properties

<b>Appearance:</b>	Colorless Crystalline.
<b>Odor:</b>	No data available.
<b>Solubility:</b>	No data available
<b>Specific Gravity:</b>	1 g/cm <sup>3</sup>
<b>pH:</b>	Neutral, pH 5 > 9
<b>% Volatiles by volume @ 21C (70F):</b>	ca. 99
<b>Boiling Point:</b>	100°-108°C
<b>Melting Point:</b>	185 °C
<b>Vapor Density (Air=1):</b>	Not applicable.
<b>Vapor Pressure (mm Hg):</b>	Not applicable.

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## 10. Stability and Reactivity



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## STABILITY

- Stable: Stable.
- Stable under recommended storage conditions.

## MATERIAL TO AVOID

- Materials to Avoid: Strong Oxidizing material....

## HAZARDOUS DECOMPOSITION PRODUCTS

- Formed under Fire Conditions.
- Carbon oxides, Nitrogen oxides (NOx), Ammonia

## HAZARDOUS POLYMERIZATION

- Will not occur.

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## 11. Toxicological Information

**ACUTE TOXICITY:** N/A

**IRRITATION AND CORROSION:** N/A

**SENSITIZATION:** N/A

**CHRONIC EXPOSURE:**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by OSHA.

**POTENTIAL HEALTH EFFECTS:**

**INHALATION** May be harmful if inhaled. Causes respiratory tract irritation.

**SKIN** Causes skin irritation.

**EYES** Causes eye irritation.

**INGESTION** May be harmful if swallowed. May cause slight gastrointestinal irritation, May cause stomach pain, cramps and/or diarrhea.



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**SIGNS AND SYMPTOMS OF EXPOSURE:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**ADDITIONAL INFORMATION:** RTECS: N/A

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## 12. Ecological Information

<b>Eco-toxicity:</b>	No data available
<b>Environmental:</b>	No information available
<b>Physical:</b>	No information available.
<b>Other:</b>	Do not empty into drains.

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## 13. Disposal Considerations

### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**The product is not classified as dangerous for the environment.**

### CONTAMINATED PACKAGING

- Dispose of as unused product.
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## 14. Transport Information

<b>DOT (US):</b>	Not dangerous goods
<b>Environmental hazards:</b>	No
<b>IMDG:</b>	Not dangerous goods
<b>IATA</b>	Not dangerous goods

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## 15. Regulatory Information

<b>OSHA HAZARDS:</b>	Irritant
<b>SARA 302:</b>	No components in this material are subject to reporting requirements of SARA Title III, Sec. 302.



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SARA 313 COMPONENTS:	Cas-No.	Revision Date
Triammonium citrate	3458-72-8	1987-01-01
SARA 311 / 312 HAZARDS:	Acute Health Hazard	

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## 16. Other Information

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions: None.

Label First Aid: Not applicable.

Product Use: Laboratory Reagent.

Revision Information: MSDS-2010492-1 rev. a Jan. 2014

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